ELSEVIER

Applied Surface Science 91 (1995) 388–392

applied surface science

Author index

Adamiec, M., see Zaborowski, M. 91 (1995) 246
Adamik, M., see Manaila, R. 91 (1995) 295
Affronte, M., see Gottlieb, U. 91 (1995) 82
Affronte, M., O. Laborde, U. Gottlieb, O. Thomas and R. Madar, Angular dependence of the magnetoresistance of $TiSi_2$ single crystals 91 (1995) 98
Ahrens, C., D. Depta, F. Schitthelm and S. Wilhelm, Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization 91 (1995) 285
Aochi, H., see Kücher, P. 91 (1995) 359
Augur, R.A., see Kordic, S. 91 (1995) 197

Bacchetta, M., C. Zaccherini and L. Zanotti, Inter-metal dielectric planarization process for 0.35 μm multilevel interconnection devices 91 (1995) 367
Bachli, A., see Dutron, A.-M. 91 (1995) 277
Bär, E. and J. Lorenz, 3D simulation of tungsten low-pressure chemical vapor deposition in contact holes 91 (1995) 321
Barcz, A., see Zaborowski, M. 91 (1995) 239
Barcz, A., see Zaborowski, M. 91 (1995) 246
Barna, P.B., see Manaila, R. 91 (1995) 295
Barrett, J., see Patterson, J.C. 91 (1995) 124
Baumann, J., see Kaufmann, C. 91 (1995) 291
Beechinor, J.T., see O'Reilly, M. 91 (1995) 152
Belevsky, V.P., see Gusev, I.V. 91 (1995) 182
Belu-Marian, A., M.D. Serbanescu, R. Manaila and A. Devenyi, Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films 91 (1995) 63
Bender, H., see Donaton, R.A. 91 (1995) 77
Bernard, C., see Pons, M. 91 (1995) 34
Bernard, C., see Bourhila, N. 91 (1995) 175
Bernard, C., see Dutron, A.-M. 91 (1995) 277
Bertz, A., T. Werner, N. Hille and T. Gessner, Effects of the biasing frequency on RIE of Cu in a Cl_2-based discharge 91 (1995) 147
Beyer, C., see Stegemann, K.-H. 91 (1995) 308
Biro, D., see Manaila, R. 91 (1995) 295
Bischoff, L., see Teichert, J. 91 (1995) 44
Blanquet, E., see Dutron, A.-M. 91 (1995) 277
Bocelli, S., G. Guizzetti, F. Marabelli, G. Thungström and C.S. Petersson, Experimental identification of the optical phonon of $CoSi_2$ in the infrared 91 (1995) 30
Bourhila, N., N. Thomas, J. Palleau, J. Torres, C. Bernard and R. Madar, Thermodynamic and experimental study of Cu-LPCVD by reduction of copper chloride 91 (1995) 175
Bouziane, K., see Mamor, M. 91 (1995) 342
Boyen, H.-G., see Kilper, R. 91 (1995) 93
Braud, F., see Mouche, M.-J. 91 (1995) 129
Braud, F., J. Torres, J. Palleau, J.L. Mermet and M.J. Mouche, Ti-diffusion barrier in Cu-based metallization 91 (1995) 251
Breternitz, V., see Nennewitz, O. 91 (1995) 347
Brijs, B., see Donaton, R.A. 91 (1995) 77
Brown, W.L., see Weber, A. 91 (1995) 314

Calegari, C., see Sanguinetti, S. 91 (1995) 103
Caymax, M., see Donaton, R.A. 91 (1995) 77
Chaix-Pluchery, O., F. Genet, G. Lucazeau and R. Madar, Raman study of tetragonal tungsten disilicide 91 (1995) 68
Chapljuk, V.I., see Gusev, I.V. 91 (1995) 182
Charatan, R.M., see Weber, A. 91 (1995) 314
Corni, F., C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo, Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions 91 (1995) 107
Cossy-Favre, A., see Kilper, R. 91 (1995) 93
Craciun, S., see Manaila, R. 91 (1995) 295
Crean, G.M., see Patterson, J.C. 91 (1995) 124
Crean, G.M., see O'Reilly, M. 91 (1995) 152
Crecelius, G., K. Radermacher, Ch. Dieker and S. Mesters, Beam induced phase transformations and self annealing in as-implanted iron silicides 91 (1995) 50
Cuthbertson, A., see Stevens, R. 91 (1995) 208

Degroote, S., see Vantomme, A. 91 (1995) 24
Degroote, S., A. Vantomme, J. Dekoster and G. Langouche, Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates 91 (1995) 72
Dekoster, J., see Vantomme, A. 91 (1995) 24

Dekoster, J., see Degroote, S. 91 (1995) 72
Depta, D., see Ahrens, C. 91 (1995) 285
Depta, D., see Kähler, J.D. 91 (1995) 339
Devenyi, A., see Belu-Marian, A. 91 (1995) 63
Devenyi, A., see Manaila, R. 91 (1995) 295
Deweerdt, B., see Lauwers, A. 91 (1995) 12
Deweerdt, B., see Jonckx, F. 91 (1995) 378
Dieker, Ch., see Crecelius, G. 91 (1995) 50
Dirks, A.G., see Kordic, S. 91 (1995) 197
Donaton, R.A., S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex, Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer 91 (1995) 77
Drescher, K., see Stavreva, Z. 91 (1995) 192
Drescher, K., see Stavrev, M. 91 (1995) 257
Drescher, K., see Vogt, M. 91 (1995) 303
Dufour-Gergam, E., see Mamor, M. 91 (1995) 342
Dutron, A.-M., E. Blanquet, C. Bernard, A. Bachli and R. Madar, LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations 91 (1995) 277

Erben, J., see Teichert, S. 91 (1995) 56

Ferretti, R., see Kähler, J.D. 91 (1995) 339
Fiedler, O., see Schulz, S.E. 91 (1995) 326
Finkman, L., see Mamor, M. 91 (1995) 342
Fontaine, G., see Stegemann, K.-H. 91 (1995) 308
Franke, Th., see Teichert, S. 91 (1995) 56
Franke, Th., see Kilper, R. 91 (1995) 93
Fröschle, B., see Ruhl, G. 91 (1995) 382
Fukada, T., T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata, Electromigration resistance of TiWN/Cu/TiWN interconnections 91 (1995) 227

Gambino, J., see Kücher, P. 91 (1995) 359
Gatz, P. and O.F. Hagena, Cluster beams for metallization of microstructured surfaces 91 (1995) 169
Gawlik, G., see Zaborowski, M. 91 (1995) 239
Genet, F., see Chaix-Pluchery, O. 91 (1995) 68
Gessner, T., see Teichert, J. 91 (1995) 44
Gessner, T., see Röber, J. 91 (1995) 134
Gessner, T., see Bertz, A. 91 (1995) 147
Gessner, T., see Kaufmann, C. 91 (1995) 291
Gessner, T., see Schulz, S.E. 91 (1995) 326
Gessner, T., see Wolf, H. 91 (1995) 332
Gottlieb, U., M. Affronte, F. Nava, O. Laborde, A. Sulpice and R. Madar, Some physical properties of $ReSi_{1.75}$ single crystals 91 (1995) 82
Gottlieb, U., see Affronte, M. 91 (1995) 98
Gräfe, A., R. Heinen, F. Klein, Th. Kruck, M. Scherer and M. Schober, Precursor development for the chemical vapor deposition of aluminium, copper and palladium 91 (1995) 187
Grignaffini Gregorio, B., see Corni, F. 91 (1995) 107
Gross, M.E., see Weber, A. 91 (1995) 314
Grünewald, W., see Schulz, S.E. 91 (1995) 326
Guizzetti, G., see Bocelli, S. 91 (1995) 30
Gusev, I.V., A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky, Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment 91 (1995) 182

Hagena, O.F., see Gatz, P. 91 (1995) 169
Hain, M., H. Körner, B. Neureither and S. Röhl, A highly reliable, low cost 0.5 μm three level tungsten metallization 91 (1995) 374
Hasegawa, M., see Fukada, T. 91 (1995) 227
Hasse, W., see Weide, K. 91 (1995) 234
Häussler, P., see Teichert, S. 91 (1995) 56
Häussler, P., see Kilper, R. 91 (1995) 93
Heinen, R., see Gräfe, A. 91 (1995) 187
Heinig, V., see Stegemann, K.-H. 91 (1995) 308
Henrion, W., see Teichert, S. 91 (1995) 56
Herz, K. and M. Powalla, Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates 91 (1995) 87
Hesse, E., see Teichert, J. 91 (1995) 44
Hille, N., see Bertz, A. 91 (1995) 147
Hintze, B., see Schulz, S.E. 91 (1995) 326

Intemann, A., see Ruhl, G. 91 (1995) 382

Janssen, G.C.A.M., see Jongste, J.F. 91 (1995) 162
Janssen, G.C.A.M., see Leusink, G.J. 91 (1995) 215
Jiang, X., see Patterson, J.C. 91 (1995) 124
Jiang, X., see O'Reilly, M. 91 (1995) 152
Jonckx, F., R. Verbeeck, B. Deweerdt and K. Maex, On the formation of silicides on poly runners with topography by a two-step silicidation process 91 (1995) 378
Jongste, J.F., T.G.M. Oosterlaken, G.J. Leusink, C.A. van der Jeugd, G.C.A.M. Janssen and S. Radelaar, Influence of mixed reductants on the growth rate of WF_6-based W-CVD 91 (1995) 162
Jongste, J.F., see Leusink, G.J. 91 (1995) 215

Kähler, J.D., D. Depta and R. Ferretti, Selective deposition of tungsten on ITM-$CoSi_2$ 91 (1995) 339
Kaufmann, C., see Röber, J. 91 (1995) 134
Kaufmann, C., J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner, Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization 91 (1995) 291
Kilper, R., see Teichert, S. 91 (1995) 56
Kilper, R., St. Teichert, Th. Franke, P. Häussler, H.-G. Boyen, A. Cossy-Favre

and P. Oelhafen, Photoelectron spectroscopic investigations of thin Fe_xSi_{100-x} films 91 (1995) 93
Klages, C.-P., see Weber, A. 91 (1995) 314
Klein, F., see Gräfe, A. 91 (1995) 187
Kolodinski, S., see Donaton, R.A. 91 (1995) 77
Kordic, S., R.A. Augur, A.G. Dirks and R.A.M. Wolters, Stress voiding and electromigration phenomena in aluminum alloys 91 (1995) 197
Körner, H., see Hain, M. 91 (1995) 374
Kruck, Th., see Gräfe, A. 91 (1995) 187
Kücher, P., H. Aochi, J. Gambino, T. Licata, T. Matsuda, S. Nguyen, M. Okazaki, H. Palm and M. Ronay, Advanced metallization technology for 256M DRAM 91 (1995) 359
Kuznetsov, V.S., see Zimin, S.P. 91 (1995) 355

Laborde, O., see Gottlieb, U. 91 (1995) 82
Laborde, O., see Affronte, M. 91 (1995) 98
Lange, H., see Teichert, S. 91 (1995) 56
Langouche, G., see Vantomme, A. 91 (1995) 24
Langouche, G., see Degroote, S. 91 (1995) 72
Lauwers, A., Q.F. Wang, B. Deweerdt and K. Maex, Ti/Co bilayers in salicide technology: electrical evaluation 91 (1995) 12
La Via, F., see Ravesi, S. 91 (1995) 19
Leusink, G.J., see Jongste, J.F. 91 (1995) 162
Leusink, G.J., J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar, Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates 91 (1995) 215
Licata, T., see Kücher, P. 91 (1995) 359
Löbner, B., see Teichert, J. 91 (1995) 44
Lokker, J.P., see Leusink, G.J. 91 (1995) 215
Lorenz, J., see Bär, E. 91 (1995) 321
Lucazeau, G., see Chaix-Pluchery, O. 91 (1995) 68
Lynch, S., see O'Reilly, M. 91 (1995) 152

Madar, R., see Pons, M. 91 (1995) 34
Madar, R., see Chaix-Pluchery, O. 91 (1995) 68
Madar, R., see Gottlieb, U. 91 (1995) 82
Madar, R., see Affronte, M. 91 (1995) 98
Madar, R., see Bourhila, N. 91 (1995) 175
Madar, R., see Dutron, A.-M. 91 (1995) 277
Maex, K., see Lauwers, A. 91 (1995) 12
Maex, K., see Donaton, R.A. 91 (1995) 77
Maex, K., see Stevens, R. 91 (1995) 208
Maex, K., see Jonckx, F. 91 (1995) 378
Mamor, M., E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane, W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height 91 (1995) 342
Manaila, R., see Belu-Marian, A. 91 (1995) 63
Manaila, R., D. Biro, P.B. Barna, M. Adamik, F. Zavaliche, S. Craciun and A. Devenyi, Ti nitride phases in thin films deposited by DC magnetron sputtering 91 (1995) 295
Marabelli, F., see Bocelli, S. 91 (1995) 30
Marangon, M.S., G. Queirolo and C. Savoia, Nucleation and growth of CVD-W on TiN studied by X-ray fluorescence spectrometry 91 (1995) 157
Matsuda, T., see Kücher, P. 91 (1995) 359
Mermet, J.-L., see Mouche, M.-J. 91 (1995) 129
Mermet, J.-L., see Braud, F. 91 (1995) 251
Mesters, S., see Crecelius, G. 91 (1995) 50
Meyer, F., see Mamor, M. 91 (1995) 342
Meynen, H., see Stevens, R. 91 (1995) 208
Miglio, L., see Sanguinetti, S. 91 (1995) 103
Mohnjuk, A.A., see Gusev, I.V. 91 (1995) 182
Möller, A., see Stavrev, M. 91 (1995) 257
Mori, T., see Fukada, T. 91 (1995) 227
Mouche, M.-J., J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud, Process optimization of copper MOCVD using modeling experimental design 91 (1995) 129
Mouche, M.-J., see Braud, F. 91 (1995) 251

Namba, K., see Fukada, T. 91 (1995) 227
Nava, F., see Gottlieb, U. 91 (1995) 82
Nennewitz, O., L. Spiess and V. Breternitz, Ohmic contacts to p-type 6H-silicon carbide 91 (1995) 347
Neureither, B., see Hain, M. 91 (1995) 374
Nguyen, S., see Kücher, P. 91 (1995) 359
Nicolet, M.-A., Ternary amorphous metallic thin films as diffusion barriers for Cu metallization 91 (1995) 269
Ni Dheasuna, C., see Patterson, J.C. 91 (1995) 124
Ni Dheasuna, C., see O'Reilly, M. 91 (1995) 152
Nikulski, R., see Weber, A. 91 (1995) 314
Nobili, C., see Corni, F. 91 (1995) 107

Oelhafen, P., see Kilper, R. 91 (1995) 93
Ogata, K., see Fukada, T. 91 (1995) 227
Ohba, T., Advanced multilevel metallization technology 91 (1995) 1
Okazaki, M., see Kücher, P. 91 (1995) 359
Oosterlaken, T.G.M., see Jongste, J.F. 91 (1995) 162
Oosterlaken, T.G.M., see Leusink, G.J. 91 (1995) 215
Opilan, R.L., see Weber, A. 91 (1995) 314
O'Reilly, M., see Patterson, J.C. 91 (1995) 124
O'Reilly, M., X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean, Investigation of the oxidation behaviour of thin film and bulk copper 91 (1995) 152
Ottaviani, G., see Corni, F. 91 (1995) 107

Palleau, J., see Mouche, M.-J. 91 (1995) 129
Palleau, J., see Bourhila, N. 91 (1995) 175
Palleau, J., see Braud, F. 91 (1995) 251
Palm, H., see Kücher, P. 91 (1995) 359
Palorec, J., see Stegemann, K.-H. 91 (1995) 308
Pamler, W., see Ruhl, G. 91 (1995) 382
Panknin, D., see Teichert, J. 91 (1995) 44
Panknin, D., see Teichert, S. 91 (1995) 56
Patterson, J.C., C. Ni Dheasuna, J. Barrett, T.R. Spalding, M. O'Reilly, X. Jiang and G.M. Crean, Electroless copper metallisation of titanium nitride 91 (1995) 124
Patterson, J.C., see O'Reilly, M. 91 (1995) 152
Pelleg, J., see Sade, G. 91 (1995) 263
Petersson, C.S., see Bocelli, S. 91 (1995) 30
Pires, F., see Mouche, M.-J. 91 (1995) 129
Plötner, M., see Stavreva, Z. 91 (1995) 192
Pons, M., C. Bernard, H. Rouch and R. Madar, The modelling routes for the chemical vapour deposition process: application to $Si_{1-x}Ge_x$ deposition 91 (1995) 34
Powalla, M., see Herz, K. 91 (1995) 87
Prokaznikov, A.V., see Zimin, S.P. 91 (1995) 355

Queirolo, G., see Corni, F. 91 (1995) 107
Queirolo, G., see Marangon, M.S. 91 (1995) 157

Radelaar, S., see Jongste, J.F. 91 (1995) 162
Radelaar, S., see Leusink, G.J. 91 (1995) 215
Radermacher, K., see Crecelius, G. 91 (1995) 50
Raineri, V., see Ravesi, S. 91 (1995) 19
Ramm, P., see Ruhl, G. 91 (1995) 382
Rangelow, I.W., see Zaborowski, M. 91 (1995) 239
Raschke, T., see Kaufmann, C. 91 (1995) 291
Ravesi, S., F. La Via, V. Raineri and C. Spinella, Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon 91 (1995) 19
Remenyuk, A.D. and N.M. Schmidt, The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization 91 (1995) 352
Rennau, M., see Kaufmann, C. 91 (1995) 291
Richard, E., see Mouche, M.-J. 91 (1995) 129
Röber, J., C. Kaufmann and T. Gessner, Structure and electrical properties of thin copper films deposited by MOCVD 91 (1995) 134
Röhl, S., see Hain, M. 91 (1995) 374
Ronay, M., see Kücher, P. 91 (1995) 359
Rouch, H., see Pons, M. 91 (1995) 34
Roussel, Ph.J., see Donaton, R.A. 91 (1995) 77
Roussel, Ph.J., see Stevens, R. 91 (1995) 208
Ruhl, G., B. Fröschle, P. Ramm, A. Intemann and W. Pamler, Deposition of titanium nitride/tungsten layers for application in vertically integrated circuits technology 91 (1995) 382

Sade, G. and J. Pelleg, Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization 91 (1995) 263
Sanguinetti, S., C. Calegari and L. Miglio, Phonon dispersion relations of metallic $NiSi_2$ and $CoSi_2$ by semi-empirical tight-binding calculation 91 (1995) 103
Savoia, C., see Marangon, M.S. 91 (1995) 157
Scherer, M., see Gräfe, A. 91 (1995) 187
Schitthelm, F., see Ahrens, C. 91 (1995) 285
Schmidt, N.M., see Remenyuk, A.D. 91 (1995) 352
Schneider, P., see Teichert, J. 91 (1995) 44
Schober, M., see Gräfe, A. 91 (1995) 187
Schulz, S.E., B. Hintze, W. Grünewald, O. Fiedler and T. Gessner, Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements 91 (1995) 326
Schulz, S.E., see Wolf, H. 91 (1995) 332
Serbanescu, M.D., see Belu-Marian, A. 91 (1995) 63
Shingubara, S., I. Utsunomiya and T. Takahagi, Interaction of a void and a grain boundary under a high electric current stress employing three-dimensional molecular dynamics simulation 91 (1995) 220
Spalding, T.R., see Patterson, J.C. 91 (1995) 124
Spiess, L., see Nennewitz, O. 91 (1995) 347
Spinella, C., see Ravesi, S. 91 (1995) 19
Stavrev, M., C. Wenzel, A. Möller and K. Drescher, Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition 91 (1995) 257
Stavreva, Z., D. Zeidler, M. Plötner and K. Drescher, Chemical mechanical polishing of copper for multilevel metallization 91 (1995) 192
Stegemann, K.-H., V. Heinig, G. Fontaine, J. Palorec and C. Beyer, Integration of a TiN barrier layer formed by rapid thermal annealing in a 1 μm CMOS process 91 (1995) 308
Steinbrüchel, C., Patterning of copper for multilevel metallization: reactive ion etching and chemical–mechanical polishing 91 (1995) 139
Stevens, R., A. Witvrouw, Ph.J. Roussel, K. Maex, H. Meynen and A. Cuthbertson, Influence of the anti reflective coating on the electromigration resistance of 0.5 μm technology metal-2 line structures 91 (1995) 208
Streiter, R., see Wolf, H. 91 (1995) 332
Sulpice, A., see Gottlieb, U. 91 (1995) 82

Takahagi, T., see Shingubara, S. 91 (1995) 220
Teichert, J., L. Bischoff, E. Hesse, P. Schneider, D. Panknin, T. Gessner, B. Löbner and N. Zichner, Comparison of

$CoSi_2$ interconnection lines on crystalline and noncrystalline silicon fabricated by writing focused ion beam implantation 91 (1995) 44
Teichert, St., R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin, Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films 91 (1995) 56
Teichert, St., see Kilper, R. 91 (1995) 93
Thomas, N., see Bourhila, N. 91 (1995) 175
Thomas, O., see Affronte, M. 91 (1995) 98
Thungström, G., see Bocelli, S. 91 (1995) 30
Tonini, R., see Corni, F. 91 (1995) 107
Torres, J., Advanced copper interconnections for silicon CMOS technologies 91 (1995) 112
Torres, J., see Mouche, M.-J. 91 (1995) 129
Torres, J., see Bourhila, N. 91 (1995) 175
Torres, J., see Braud, F. 91 (1995) 251
Toyoda, Y., see Fukada, T. 91 (1995) 227
Tremblay, G., see Mamor, M. 91 (1995) 342

Ullmann, J., see Weide, K. 91 (1995) 234
Utsunomiya, I., see Shingubara, S. 91 (1995) 220

Van den Homberg, M.J.C., see Leusink, G.J. 91 (1995) 215
Van der Jeugd, C.A., see Jongste, J.F. 91 (1995) 162
Vantomme, A., S. Degroote, J. Dekoster and G. Langouche, Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy 91 (1995) 24
Vantomme, A., see Degroote, S. 91 (1995) 72
Verbeeck, R., see Jonckx, F. 91 (1995) 378
Vogt, M. and K. Drescher, Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion 91 (1995) 303

Wang, Q.F., see Lauwers, A. 91 (1995) 12
Weber, A., R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown, Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process 91 (1995) 314
Weide, K., J. Ullmann and W. Hasse, Model calculations on a bipolar transistor emitter interconnection with different contact shapes 91 (1995) 234
Wenzel, C., see Stavrev, M. 91 (1995) 257
Werner, T., see Bertz, A. 91 (1995) 147
Wilhelm, S., see Ahrens, C. 91 (1995) 285
Witvrouw, A., see Stevens, R. 91 (1995) 208
Wolf, H., R. Streiter, S.E. Schulz and T. Gessner, Growth rate modeling for selective tungsten LPCVD 91 (1995) 332
Wolters, R.A.M., see Kordic, S. 91 (1995) 197

Zaborowski, M., A. Barcz, G. Gawlik and I.W. Rangelow, The effect of ion implantation on the properties of Al films 91 (1995) 239
Zaborowski, M., M. Adamiec and A. Barcz, Hillock recognition by digital image processing 91 (1995) 246
Zaccherini, C., see Bacchetta, M. 91 (1995) 367
Zanotti, L., see Bacchetta, M. 91 (1995) 367
Zavaliche, F., see Manaila, R. 91 (1995) 295
Zeidler, D., see Stavreva, Z. 91 (1995) 192
Zichner, N., see Teichert, J. 91 (1995) 44
Zichner, N., see Kaufmann, C. 91 (1995) 291
Zimin, S.P., V.S. Kuznetsov and A.V. Prokaznikov, Electrical characteristics of aluminum contacts to porous silicon 91 (1995) 355

ELSEVIER

Applied Surface Science 91 (1995) 393–407

applied surface science

Subject index

Alloys

Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107

Stress voiding and electromigration phenomena in aluminum alloys, S. Kordic, R.A. Augur, A.G. Dirks and R.A.M. Wolters 91 (1995) 197

Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215

Aluminium

Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182

Precursor development for the chemical vapor deposition of aluminium, copper and palladium, A. Gräfe, R. Heinen, F. Klein, Th. Kruck, M. Scherer and M. Schober 91 (1995) 187

Stress voiding and electromigration phenomena in aluminum alloys, S. Kordic, R.A. Augur, A.G. Dirks and R.A.M. Wolters 91 (1995) 197

Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215

Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227

The effect of ion implantation on the properties of Al films, M. Zaborowski, A. Barcz, G. Gawlik and I.W. Rangelow 91 (1995) 239

Hillock recognition by digital image processing, M. Zaborowski, M. Adamiec and A. Barcz 91 (1995) 246

Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements, S.E. Schulz, B. Hintze, W. Grünewald, O. Fiedler and T. Gessner 91 (1995) 326

Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347

Electrical characteristics of aluminum contacts to porous silicon, S.P. Zimin, V.S. Kuznetsov and A.V. Prokaznikov 91 (1995) 355

Aluminium oxide

Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87

Amorphous materials

Ternary amorphous metallic thin films as diffusion barriers for Cu metallization, M.-A. Nicolet 91 (1995) 269

Annealing

Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107

Integration of a TiN barrier layer formed by rapid thermal annealing in a 1 μm CMOS process, K.-H. Stegemann, V. Heinig, G. Fontaine, J. Palorec and C. Beyer 91 (1995) 308

Atomic force microscopy

Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19

Electroless copper metallisation of titanium nitride, J.C. Patterson, C. Ni Dheasuna, J. Barrett, T.R. Spalding, M. O'Reilly, X. Jiang and G.M. Crean 91 (1995) 124
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257

Auger electron spectroscopy

Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107
Structure and electrical properties of thin copper films deposited by MOCVD, J. Röber, C. Kaufmann and T. Gessner 91 (1995) 134
Stress voiding and electromigration phenomena in aluminum alloys, S. Kordic, R.A. Augur, A.G. Dirks and R.A.M. Wolters 91 (1995) 197
Influence of the anti reflective coating on the electromigration resistance of 0.5 μm technology metal-2 line structures, R. Stevens, A. Witvrouw, Ph.J. Roussel, K. Maex, H. Meynen and A. Cuthbertson 91 (1995) 208
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization, G. Sade and J. Pelleg 91 (1995) 263
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization, C. Kaufmann, J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner 91 (1995) 291
Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Borides

Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization, G. Sade and J. Pelleg 91 (1995) 263

Chemical vapour deposition

Advanced multilevel metallization technology, T. Ohba 91 (1995) 1
The modelling routes for the chemical vapour deposition process: application to $Si_{1-x}Ge_x$ deposition, M. Pons, C. Bernard, H. Rouch and R. Madar 91 (1995) 34
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Process optimization of copper MOCVD using modeling experimental design, M.-J. Mouche, J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud 91 (1995) 129
Structure and electrical properties of thin copper films deposited by MOCVD, J. Röber, C. Kaufmann and T. Gessner 91 (1995) 134
Nucleation and growth of CVD-W on TiN studied by X-ray fluorescence spectrometry, M.S. Marangon, G. Queirolo and C. Savoia 91 (1995) 157
Influence of mixed reductants on the growth rate of WF_6-based W-CVD, J.F. Jongste, T.G.M. Oosterlaken, G.J. Leusink, C.A. van der Jeugd, G.C.A.M. Janssen and S. Radelaar 91 (1995) 162
Thermodynamic and experimental study of Cu-LPCVD by reduction of copper chloride, N. Bourhila, N. Thomas, J. Palleau, J. Torres, C. Bernard and R. Madar 91 (1995) 175
Precursor development for the chemical vapor deposition of aluminium, copper and palladium, A. Gräfe, R. Heinen, F. Klein, Th. Kruck, M. Scherer and M. Schober 91 (1995) 187
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314
3D simulation of tungsten low-pressure chemical vapor deposition in contact holes, E. Bär and J. Lorenz 91 (1995) 321
Growth rate modeling for selective tungsten LPCVD, H. Wolf, R. Streiter, S.E. Schulz and T. Gessner 91 (1995) 332
Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339

A highly reliable, low cost 0.5 μm three level tungsten metallization, M. Hain, H. Körner, B. Neureither and S. Röhl 91 (1995) 374
Deposition of titanium nitride/tungsten layers for application in vertically integrated circuits technology, G. Ruhl, B. Fröschle, P. Ramm, A. Intemann and W. Pamler 91 (1995) 382

Clusters

Cluster beams for metallization of microstructured surfaces, P. Gatz and O.F. Hagena 91 (1995) 169

Cobalt

Ti/Co bilayers in salicide technology: electrical evaluation, A. Lauwers, Q.F. Wang, B. Deweerdt and K. Maex 91 (1995) 12
Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19
Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24
Experimental identification of the optical phonon of $CoSi_2$ in the infrared, S. Bocelli, G. Guizzetti, F. Marabelli, G. Thungström and C.S. Petersson 91 (1995) 30
Comparison of $CoSi_2$ interconnection lines on crystalline and noncrystalline silicon fabricated by writing focused ion beam implantation, J. Teichert, L. Bischoff, E. Hesse, P. Schneider, D. Panknin, T. Gessner, B. Löbner and N. Zichner 91 (1995) 44
Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Phonon dispersion relations of metallic $NiSi_2$ and $CoSi_2$ by semi-empirical tight-binding calculation, S. Sanguinetti, C. Calegari and L. Miglio 91 (1995) 103
Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339
On the formation of silicides on poly runners with topography by a two-step silicidation process, F. Jonckx, R. Verbeeck, B. Deweerdt and K. Maex 91 (1995) 378

Computer simulations

3D simulation of tungsten low-pressure chemical vapor deposition in contact holes, E. Bär and J. Lorenz 91 (1995) 321

Copper

Advanced copper interconnections for silicon CMOS technologies, J. Torres 91 (1995) 112
Electroless copper metallisation of titanium nitride, J.C. Patterson, C. Ni Dheasuna, J. Barrett, T.R. Spalding, M. O'Reilly, X. Jiang and G.M. Crean 91 (1995) 124
Process optimization of copper MOCVD using modeling experimental design, M.-J. Mouche, J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud 91 (1995) 129
Structure and electrical properties of thin copper films deposited by MOCVD, J. Röber, C. Kaufmann and T. Gessner 91 (1995) 134
Patterning of copper for multilevel metallization: reactive ion etching and chemical–mechanical polishing, C. Steinbrüchel 91 (1995) 139
Effects of the biasing frequency on RIE of Cu in a Cl_2-based discharge, A. Bertz, T. Werner, N. Hille and T. Gessner 91 (1995) 147
Investigation of the oxidation behaviour of thin film and bulk copper, M. O'Reilly, X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean 91 (1995) 152
Thermodynamic and experimental study of Cu-LPCVD by reduction of copper chloride, N. Bourhila, N. Thomas, J. Palleau, J. Torres, C. Bernard and R. Madar 91 (1995) 175
Precursor development for the chemical vapor deposition of aluminium, copper and palladium, A. Gräfe, R. Heinen, F. Klein, Th. Kruck, M. Scherer and M. Schober 91 (1995) 187
Chemical mechanical polishing of copper for multilevel metallization, Z. Stavreva, D. Zeidler, M. Plötner and K. Drescher 91 (1995) 192
Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215
Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227

Model calculations on a bipolar transistor emitter interconnection with different contact shapes, K. Weide, J. Ullmann and W. Hasse 91 (1995) 234
Ti-diffusion barrier in Cu-based metallization, F. Braud, J. Torres, J. Palleau, J.L. Mermet and M.J. Mouche 91 (1995) 251
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization, G. Sade and J. Pelleg 91 (1995) 263
Ternary amorphous metallic thin films as diffusion barriers for Cu metallization, M.-A. Nicolet 91 (1995) 269
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization, C. Ahrens, D. Depta, F. Schitthelm and S. Wilhelm 91 (1995) 285
Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Depth profiling

Influence of the anti reflective coating on the electromigration resistance of 0.5 μm technology metal-2 line structures, R. Stevens, A. Witvrouw, Ph.J. Roussel, K. Maex, H. Meynen and A. Cuthbertson 91 (1995) 208

Electrical properties

Ti/Co bilayers in salicide technology: electrical evaluation, A. Lauwers, Q.F. Wang, B. Deweerdt and K. Maex 91 (1995) 12
Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19
Comparison of $CoSi_2$ interconnection lines on crystalline and noncrystalline silicon fabricated by writing focused ion beam implantation, J. Teichert, L. Bischoff, E. Hesse, P. Schneider, D. Panknin, T. Gessner, B. Löbner and N. Zichner 91 (1995) 44
Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56
Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Some physical properties of $ReSi_{1.75}$ single crystals, U. Gottlieb, M. Affronte, F. Nava, O. Laborde, A. Sulpice and R. Madar 91 (1995) 82
Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87
Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107
Process optimization of copper MOCVD using modeling experimental design, M.-J. Mouche, J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud 91 (1995) 129
Influence of the anti reflective coating on the electromigration resistance of 0.5 μm technology metal-2 line structures, R. Stevens, A. Witvrouw, Ph.J. Roussel, K. Maex, H. Meynen and A. Cuthbertson 91 (1995) 208
Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227
Model calculations on a bipolar transistor emitter interconnection with different contact shapes, K. Weide, J. Ullmann and W. Hasse 91 (1995) 234
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization, C. Ahrens, D. Depta, F. Schitthelm and S. Wilhelm 91 (1995) 285
Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization, C. Kaufmann, J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner 91 (1995) 291
Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303
Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements, S.E. Schulz, B.

Hintze, W. Grünewald, O. Fiedler and T. Gessner 91 (1995) 326
Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339
W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height, M. Mamor, E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane 91 (1995) 342
Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347
The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization, A.D. Remenyuk and N.M. Schmidt 91 (1995) 352
Electrical characteristics of aluminum contacts to porous silicon, S.P. Zimin, V.S. Kuznetsov and A.V. Prokaznikov 91 (1995) 355
On the formation of silicides on poly runners with topography by a two-step silicidation process, F. Jonckx, R. Verbeeck, B. Deweerdt and K. Maex 91 (1995) 378

Electron diffraction

Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50

Electron energy loss spectroscopy

Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50

Electron microscopy

Ti/Co bilayers in salicide technology: electrical evaluation, A. Lauwers, Q.F. Wang, B. Deweerdt and K. Maex 91 (1995) 12
Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19
Comparison of $CoSi_2$ interconnection lines on crystalline and noncrystalline silicon fabricated by writing focused ion beam implantation, J. Teichert, L. Bischoff, E. Hesse, P. Schneider, D. Panknin, T. Gessner, B. Löbner and N. Zichner 91 (1995) 44
Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107
Electroless copper metallisation of titanium nitride, J.C. Patterson, C. Ni Dheasuna, J. Barrett, T.R. Spalding, M. O'Reilly, X. Jiang and G.M. Crean 91 (1995) 124
Process optimization of copper MOCVD using modeling experimental design, M.-J. Mouche, J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud 91 (1995) 129
Structure and electrical properties of thin copper films deposited by MOCVD, J. Röber, C. Kaufmann and T. Gessner 91 (1995) 134
Stress voiding and electromigration phenomena in aluminum alloys, S. Kordic, R.A. Augur, A.G. Dirks and R.A.M. Wolters 91 (1995) 197
Influence of the anti reflective coating on the electromigration resistance of 0.5 μm technology metal-2 line structures, R. Stevens, A. Witvrouw, Ph.J. Roussel, K. Maex, H. Meynen and A. Cuthbertson 91 (1995) 208
Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227
The effect of ion implantation on the properties of Al films, M. Zaborowski, A. Barcz, G. Gawlik and I.W. Rangelow 91 (1995) 239
Hillock recognition by digital image processing, M. Zaborowski, M. Adamiec and A. Barcz 91 (1995) 246
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization, G. Sade and J. Pelleg 91 (1995) 263
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization, C. Kaufmann, J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner 91 (1995) 291

Ti nitride phases in thin films deposited by DC magnetron sputtering, R. Manaila, D. Biro, P.B. Barna, M. Adamik, F. Zavaliche, S. Craciun and A. Devenyi 91 (1995) 295
Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements, S.E. Schulz, B. Hintze, W. Grünewald, O. Fiedler and T. Gessner 91 (1995) 326
Growth rate modeling for selective tungsten LPCVD, H. Wolf, R. Streiter, S.E. Schulz and T. Gessner 91 (1995) 332
Advanced metallization technology for 256M DRAM, P. Kücher, H. Aochi, J. Gambino, T. Licata, T. Matsuda, S. Nguyen, M. Okazaki, H. Palm and M. Ronay 91 (1995) 359
Inter-metal dielectric planarization process for 0.35 μm multilevel interconnection devices, M. Bacchetta, C. Zaccherini and L. Zanotti 91 (1995) 367
On the formation of silicides on poly runners with topography by a two-step silicidation process, F. Jonckx, R. Verbeeck, B. Deweerdt and K. Maex 91 (1995) 378

Ellipsometry

Investigation of the oxidation behaviour of thin film and bulk copper, M. O'Reilly, X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean 91 (1995) 152

Epitaxy

Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24
Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72
Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347

Etching

Patterning of copper for multilevel metallization: reactive ion etching and chemical–mechanical polishing, C. Steinbrüchel 91 (1995) 139
Effects of the biasing frequency on RIE of Cu in a Cl_2-based discharge, A. Bertz, T. Werner, N. Hille and T. Gessner 91 (1995) 147

Evaporation

Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19
Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87
Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182

Field emission microscopy

Investigation of the oxidation behaviour of thin film and bulk copper, M. O'Reilly, X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean 91 (1995) 152

Germanium

The modelling routes for the chemical vapour deposition process: application to $Si_{1-x}Ge_x$ deposition, M. Pons, C. Bernard, H. Rouch and R. Madar 91 (1995) 34
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77

Gold

The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization, A.D. Remenyuk and N.M. Schmidt 91 (1995) 352

Halogens

Effects of the biasing frequency on RIE of Cu in a Cl_2-based discharge, A. Bertz, T. Werner, N. Hille and T. Gessner 91 (1995) 147

Infrared spectroscopy

Experimental identification of the optical phonon of $CoSi_2$ in the infrared, S. Bocelli, G. Guizzetti, F. Marabelli, G. Thungström and C.S. Petersson 91 (1995) 30

Ion bombardment

Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19

Patterning of copper for multilevel metallization: reactive ion etching and chemical–mechanical polishing, C. Steinbrüchel 91 (1995) 139

Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182

Ion implantation

Comparison of $CoSi_2$ interconnection lines on crystalline and noncrystalline silicon fabricated by writing focused ion beam implantation, J. Teichert, L. Bischoff, E. Hesse, P. Schneider, D. Panknin, T. Gessner, B. Löbner and N. Zichner 91 (1995) 44

Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50

The effect of ion implantation on the properties of Al films, M. Zaborowski, A. Barcz, G. Gawlik and I.W. Rangelow 91 (1995) 239

Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339

Ion scattering

Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24

Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50

Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63

Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72

Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77

Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107

Structure and electrical properties of thin copper films deposited by MOCVD, J. Röber, C. Kaufmann and T. Gessner 91 (1995) 134

Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257

LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277

Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Iron

Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50

Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56

Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72

Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87

Photoelectron spectroscopic investigations of thin Fe_xSi_{100-x} films, R. Kilper, St. Teichert, Th. Franke, P. Häussler, H.-G. Boyen, A. Cossy-Favre and P. Oelhafen 91 (1995) 93

Magnesium oxide

Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72

Magnetic measurements

Some physical properties of $ReSi_{1.75}$ single crystals, U. Gottlieb, M. Affronte, F. Nava, O. Laborde, A. Sulpice and R. Madar 91 (1995) 82

Angular dependence of the magnetoresistance of $TiSi_2$ single crystals, M. Affronte, O. Laborde, U. Gottlieb, O. Thomas and R. Madar 91 (1995) 98

Metal–oxide–semiconductor structure (MOS)

Advanced copper interconnections for silicon CMOS technologies, J. Torres 91 (1995) 112
Integration of a TiN barrier layer formed by rapid thermal annealing in a 1 μm CMOS process, K.-H. Stegemann, V. Heinig, G. Fontaine, J. Palorec and C. Beyer 91 (1995) 308
A highly reliable, low cost 0.5 μm three level tungsten metallization, M. Hain, H. Körner, B. Neureither and S. Röhl 91 (1995) 374

Metals

Advanced multilevel metallization technology, T. Ohba 91 (1995) 1
Cluster beams for metallization of microstructured surfaces, P. Gatz and O.F. Hagena 91 (1995) 169
Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182
Advanced metallization technology for 256M DRAM, P. Kücher, H. Aochi, J. Gambino, T. Licata, T. Matsuda, S. Nguyen, M. Okazaki, H. Palm and M. Ronay 91 (1995) 359

Molecular dynamics

Interaction of a void and a grain boundary under a high electric current stress employing three-dimensional molecular dynamics simulation, S. Shingubara, I. Utsunomiya and T. Takahagi 91 (1995) 220

Nickel

Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63
Phonon dispersion relations of metallic $NiSi_2$ and $CoSi_2$ by semi-empirical tight-binding calculation, S. Sanguinetti, C. Calegari and L. Miglio 91 (1995) 103
Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107

Niobium

Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182

Nitrides

Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227

Optical properties

Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56
Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87

Oxidation

Investigation of the oxidation behaviour of thin film and bulk copper, M. O'Reilly, X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean 91 (1995) 152

Palladium

Precursor development for the chemical vapor deposition of aluminium, copper and palladium, A. Gräfe, R. Heinen, F. Klein, Th. Kruck, M. Scherer and M. Schober 91 (1995) 187
Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215

Photoelectron spectroscopy

Photoelectron spectroscopic investigations of thin Fe_xSi_{100-x} films, R. Kilper, St. Teichert, Th. Franke, P. Häussler, H.-G. Boyen, A. Cossy-Favre and P. Oelhafen 91 (1995) 93

Process optimization of copper MOCVD using modeling experimental design, M.-J. Mouche, J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud 91 (1995) 129

Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257

Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314

Plasma processing

Patterning of copper for multilevel metallization: reactive ion etching and chemical–mechanical polishing, C. Steinbrüchel 91 (1995) 139

Effects of the biasing frequency on RIE of Cu in a Cl_2-based discharge, A. Bertz, T. Werner, N. Hille and T. Gessner 91 (1995) 147

Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314

Platinum

Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107

Raman scattering

Raman study of tetragonal tungsten disilicide, O. Chaix-Pluchery, F. Genet, G. Lucazeau and R. Madar 91 (1995) 68

Rhenium

Some physical properties of $ReSi_{1.75}$ single crystals, U. Gottlieb, M. Affronte, F. Nava, O. Laborde, A. Sulpice and R. Madar 91 (1995) 82

LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277

Schottky barrier

Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization, C. Ahrens, D. Depta, F. Schitthelm and S. Wilhelm 91 (1995) 285

W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height, M. Mamor, E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane 91 (1995) 342

The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization, A.D. Remenyuk and N.M. Schmidt 91 (1995) 352

Secondary ion mass spectrometry

Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257

Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339

Semiconductors

Patterning of copper for multilevel metallization: reactive ion etching and chemical–mechanical polishing, C. Steinbrüchel 91 (1995) 139

Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215

Model calculations on a bipolar transistor emitter interconnection with different contact shapes, K. Weide, J. Ullmann and W. Hasse 91 (1995) 234

Growth rate modeling for selective tungsten LPCVD, H. Wolf, R. Streiter, S.E. Schulz and T. Gessner 91 (1995) 332

Advanced metallization technology for 256M DRAM, P. Kücher, H. Aochi, J. Gambino, T. Licata, T. Matsuda, S. Nguyen, M. Okazaki, H. Palm and M. Ronay 91 (1995) 359

Inter-metal dielectric planarization process for 0.35 μm multilevel interconnection devices, M. Bacchetta, C. Zaccherini and L. Zanotti 91 (1995) 367
Deposition of titanium nitride/tungsten layers for application in vertically integrated circuits technology, G. Ruhl, B. Fröschle, P. Ramm, A. Intemann and W. Pamler 91 (1995) 382

Silane

Growth rate modeling for selective tungsten LPCVD, H. Wolf, R. Streiter, S.E. Schulz and T. Gessner 91 (1995) 332

Silicides

Ti/Co bilayers in salicide technology: electrical evaluation, A. Lauwers, Q.F. Wang, B. Deweerdt and K. Maex 91 (1995) 12
Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19
Experimental identification of the optical phonon of $CoSi_2$ in the infrared, S. Bocelli, G. Guizzetti, F. Marabelli, G. Thungström and C.S. Petersson 91 (1995) 30
Comparison of $CoSi_2$ interconnection lines on crystalline and noncrystalline silicon fabricated by writing focused ion beam implantation, J. Teichert, L. Bischoff, E. Hesse, P. Schneider, D. Panknin, T. Gessner, B. Löbner and N. Zichner 91 (1995) 44
Beam induced phase transformations and self annealing in as-implanted iron silicides, G. Crecelius, K. Radermacher, Ch. Dieker and S. Mesters 91 (1995) 50
Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63
Raman study of tetragonal tungsten disilicide, O. Chaix-Pluchery, F. Genet, G. Lucazeau and R. Madar 91 (1995) 68
Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Some physical properties of $ReSi_{1.75}$ single crystals, U. Gottlieb, M. Affronte, F. Nava, O. Laborde, A. Sulpice and R. Madar 91 (1995) 82
Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87
Angular dependence of the magnetoresistance of $TiSi_2$ single crystals, M. Affronte, O. Laborde, U. Gottlieb, O. Thomas and R. Madar 91 (1995) 98
Phonon dispersion relations of metallic $NiSi_2$ and $CoSi_2$ by semi-empirical tight-binding calculation, S. Sanguinetti, C. Calegari and L. Miglio 91 (1995) 103
Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182
Ternary amorphous metallic thin films as diffusion barriers for Cu metallization, M.-A. Nicolet 91 (1995) 269
Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314
Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements, S.E. Schulz, B. Hintze, W. Grünewald, O. Fiedler and T. Gessner 91 (1995) 326
Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339
The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization, A.D. Remenyuk and N.M. Schmidt 91 (1995) 352
On the formation of silicides on poly runners with topography by a two-step silicidation process, F. Jonckx, R. Verbeeck, B. Deweerdt and K. Maex 91 (1995) 378

Silicon

Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24
The modelling routes for the chemical vapour deposition process: application to $Si_{1-x}Ge_x$ deposition, M. Pons, C. Bernard, H. Rouch and R. Madar 91 (1995) 34

Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56
Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Photoelectron spectroscopic investigations of thin Fe_xSi_{100-x} films, R. Kilper, St. Teichert, Th. Franke, P. Häussler, H.-G. Boyen, A. Cossy-Favre and P. Oelhafen 91 (1995) 93
Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107
Advanced copper interconnections for silicon CMOS technologies, J. Torres 91 (1995) 112
Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height, M. Mamor, E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane 91 (1995) 342
Electrical characteristics of aluminum contacts to porous silicon, S.P. Zimin, V.S. Kuznetsov and A.V. Prokaznikov 91 (1995) 355

Silicon carbide

Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347

Silicon nitride

LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Silicon oxide

Ti-diffusion barrier in Cu-based metallization, F. Braud, J. Torres, J. Palleau, J.L. Mermet and M.J. Mouche 91 (1995) 251
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Barrier behaviour of plasma deposited silicon oxide and nitride against Cu diffusion, M. Vogt and K. Drescher 91 (1995) 303

Silver

The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization, A.D. Remenyuk and N.M. Schmidt 91 (1995) 352

Sputter deposition

Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56
Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107
Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215
Hillock recognition by digital image processing, M. Zaborowski, M. Adamiec and A. Barcz 91 (1995) 246

Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization, G. Sade and J. Pelleg 91 (1995) 263
Ternary amorphous metallic thin films as diffusion barriers for Cu metallization, M.-A. Nicolet 91 (1995) 269
Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization, C. Ahrens, D. Depta, F. Schitthelm and S. Wilhelm 91 (1995) 285
Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization, C. Kaufmann, J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner 91 (1995) 291
Ti nitride phases in thin films deposited by DC magnetron sputtering, R. Manaila, D. Biro, P.B. Barna, M. Adamik, F. Zavaliche, S. Craciun and A. Devenyi 91 (1995) 295
Integration of a TiN barrier layer formed by rapid thermal annealing in a 1 μm CMOS process, K.-H. Stegemann, V. Heinig, G. Fontaine, J. Palorec and C. Beyer 91 (1995) 308
W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height, M. Mamor, E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane 91 (1995) 342
Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347

Tantalum

Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257

Thin films

Advanced multilevel metallization technology, T. Ohba 91 (1995) 1
Ti/Co bilayers in salicide technology: electrical evaluation, A. Lauwers, Q.F. Wang, B. Deweerdt and K. Maex 91 (1995) 12
Improved thermal stability of cobalt silicide formed by ion beam assisted deposition on polysilicon, S. Ravesi, F. La Via, V. Raineri and C. Spinella 91 (1995) 19
Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24
Electrical and optical properties of thin $Fe_{1-x}Co_xSi_2$ films, S. Teichert, R. Kilper, T. Franke, J. Erben, P. Häussler, W. Henrion, H. Lange and D. Panknin 91 (1995) 56
Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63
Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72
Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77
Electrical and optical properties of thin β-$FeSi_2$ films on Al_2O_3 substrates, K. Herz and M. Powalla 91 (1995) 87
Photoelectron spectroscopic investigations of thin Fe_xSi_{100-x} films, R. Kilper, St. Teichert, Th. Franke, P. Häussler, H.-G. Boyen, A. Cossy-Favre and P. Oelhafen 91 (1995) 93
Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107
Electroless copper metallisation of titanium nitride, J.C. Patterson, C. Ni Dheasuna, J. Barrett, T.R. Spalding, M. O'Reilly, X. Jiang and G.M. Crean 91 (1995) 124
Process optimization of copper MOCVD using modeling experimental design, M.-J. Mouche, J.-L. Mermet, F. Pires, E. Richard, J. Torres, J. Palleau and F. Braud 91 (1995) 129
Structure and electrical properties of thin copper films deposited by MOCVD, J. Röber, C. Kaufmann and T. Gessner 91 (1995) 134
Effects of the biasing frequency on RIE of Cu in a Cl_2-based discharge, A. Bertz, T. Werner, N. Hille and T. Gessner 91 (1995) 147
Investigation of the oxidation behaviour of thin film and bulk copper, M. O'Reilly, X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean 91 (1995) 152
Nucleation and growth of CVD-W on TiN studied by X-ray fluorescence spectrometry, M.S. Marangon, G. Queirolo and C. Savoia 91 (1995) 157
Influence of mixed reductants on the growth rate of WF_6-based W-CVD, J.F. Jongste,

T.G.M. Oosterlaken, G.J. Leusink, C.A. van der Jeugd, G.C.A.M. Janssen and S. Radelaar 91 (1995) 162
Cluster beams for metallization of microstructured surfaces, P. Gatz and O.F. Hagena 91 (1995) 169
Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182
Precursor development for the chemical vapor deposition of aluminium, copper and palladium, A. Gräfe, R. Heinen, F. Klein, Th. Kruck, M. Scherer and M. Schober 91 (1995) 187
Stress voiding and electromigration phenomena in aluminum alloys, S. Kordic, R.A. Augur, A.G. Dirks and R.A.M. Wolters 91 (1995) 197
Influence of the anti reflective coating on the electromigration resistance of 0.5 μm technology metal-2 line structures, R. Stevens, A. Witvrouw, Ph.J. Roussel, K. Maex, H. Meynen and A. Cuthbertson 91 (1995) 208
Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215
Interaction of a void and a grain boundary under a high electric current stress employing three-dimensional molecular dynamics simulation, S. Shingubara, I. Utsunomiya and T. Takahagi 91 (1995) 220
Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227
Model calculations on a bipolar transistor emitter interconnection with different contact shapes, K. Weide, J. Ullmann and W. Hasse 91 (1995) 234
The effect of ion implantation on the properties of Al films, M. Zaborowski, A. Barcz, G. Gawlik and I.W. Rangelow 91 (1995) 239
Hillock recognition by digital image processing, M. Zaborowski, M. Adamiec and A. Barcz 91 (1995) 246
Ti-diffusion barrier in Cu-based metallization, F. Braud, J. Torres, J. Palleau, J.L. Mermet and M.J. Mouche 91 (1995) 251
Sputtering of tantalum-based diffusion barriers in Si/Cu metallization: effects of gas pressure and composition, M. Stavrev, C. Wenzel, A. Möller and K. Drescher 91 (1995) 257
Ternary amorphous metallic thin films as diffusion barriers for Cu metallization, M.-A. Nicolet 91 (1995) 269
LPCVD $Re_xSi_yN_z$ diffusion barriers in $Si/SiO_2/Cu$ metallizations, A.-M. Dutron, E. Blanquet, C. Bernard, A. Bachli and R. Madar 91 (1995) 277
Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization, C. Ahrens, D. Depta, F. Schitthelm and S. Wilhelm 91 (1995) 285
Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization, C. Kaufmann, J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner 91 (1995) 291
Ti nitride phases in thin films deposited by DC magnetron sputtering, R. Manaila, D. Biro, P.B. Barna, M. Adamik, F. Zavaliche, S. Craciun and A. Devenyi 91 (1995) 295
Integration of a TiN barrier layer formed by rapid thermal annealing in a 1 μm CMOS process, K.-H. Stegemann, V. Heinig, G. Fontaine, J. Palorec and C. Beyer 91 (1995) 308
Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314
3D simulation of tungsten low-pressure chemical vapor deposition in contact holes, E. Bär and J. Lorenz 91 (1995) 321
Growth rate modeling for selective tungsten LPCVD, H. Wolf, R. Streiter, S.E. Schulz and T. Gessner 91 (1995) 332
Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339
Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347
Advanced metallization technology for 256M DRAM, P. Kücher, H. Aochi, J. Gambino, T. Licata, T. Matsuda, S. Nguyen, M. Okazaki, H. Palm and M. Ronay 91 (1995) 359
Inter-metal dielectric planarization process for 0.35 μm multilevel interconnection devices, M. Bacchetta, C. Zaccherini and L. Zanotti 91 (1995) 367
A highly reliable, low cost 0.5 μm three level tungsten metallization, M. Hain, H. Körner, B. Neureither and S. Röhl 91 (1995) 374
Deposition of titanium nitride/tungsten layers for application in vertically integrated circuits technology, G. Ruhl, B. Fröschle, P. Ramm, A. Intemann and W. Pamler 91 (1995) 382

Titanium

Ti/Co bilayers in salicide technology: electrical evaluation, A. Lauwers, Q.F. Wang, B. Deweerdt and K. Maex 91 (1995) 12

Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24

Angular dependence of the magnetoresistance of $TiSi_2$ single crystals, M. Affronte, O. Laborde, U. Gottlieb, O. Thomas and R. Madar 91 (1995) 98

Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182

Electromigration resistance of TiWN/Cu/TiWN interconnections, T. Fukada, T. Mori, Y. Toyoda, M. Hasegawa, K. Namba and K. Ogata 91 (1995) 227

Ti-diffusion barrier in Cu-based metallization, F. Braud, J. Torres, J. Palleau, J.L. Mermet and M.J. Mouche 91 (1995) 251

Co-sputtered TiB_2 as a diffusion barrier for advanced microelectronics with Cu metallization, G. Sade and J. Pelleg 91 (1995) 263

Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314

Ohmic contacts to p-type 6H-silicon carbide, O. Nennewitz, L. Spiess and V. Breternitz 91 (1995) 347

On the formation of silicides on poly runners with topography by a two-step silicidation process, F. Jonckx, R. Verbeeck, B. Deweerdt and K. Maex 91 (1995) 378

Titanium nitride

Electroless copper metallisation of titanium nitride, J.C. Patterson, C. Ni Dheasuna, J. Barrett, T.R. Spalding, M. O'Reilly, X. Jiang and G.M. Crean 91 (1995) 124

Nucleation and growth of CVD-W on TiN studied by X-ray fluorescence spectrometry, M.S. Marangon, G. Queirolo and C. Savoia 91 (1995) 157

Electrical characterization of conductive and non-conductive barrier layers for Cu-metallization, C. Ahrens, D. Depta, F. Schitthelm and S. Wilhelm 91 (1995) 285

Electrical characterization of reactively sputtered TiN diffusion barrier layers for copper metallization, C. Kaufmann, J. Baumann, T. Gessner, T. Raschke, M. Rennau and N. Zichner 91 (1995) 291

Ti nitride phases in thin films deposited by DC magnetron sputtering, R. Manaila, D. Biro, P.B. Barna, M. Adamik, F. Zavaliche, S. Craciun and A. Devenyi 91 (1995) 295

Integration of a TiN barrier layer formed by rapid thermal annealing in a 1 μm CMOS process, K.-H. Stegemann, V. Heinig, G. Fontaine, J. Palorec and C. Beyer 91 (1995) 308

Aspects of TiN and Ti deposition in an ECR plasma enhanced CVD process, A. Weber, R. Nikulski, C.-P. Klages, M.E. Gross, R.M. Charatan, R.L. Opilan and W.L. Brown 91 (1995) 314

Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements, S.E. Schulz, B. Hintze, W. Grünewald, O. Fiedler and T. Gessner 91 (1995) 326

Deposition of titanium nitride/tungsten layers for application in vertically integrated circuits technology, G. Ruhl, B. Fröschle, P. Ramm, A. Intemann and W. Pamler 91 (1995) 382

Tungsten

Raman study of tetragonal tungsten disilicide, O. Chaix-Pluchery, F. Genet, G. Lucazeau and R. Madar 91 (1995) 68

Nucleation and growth of CVD-W on TiN studied by X-ray fluorescence spectrometry, M.S. Marangon, G. Queirolo and C. Savoia 91 (1995) 157

Influence of mixed reductants on the growth rate of WF_6-based W-CVD, J.F. Jongste, T.G.M. Oosterlaken, G.J. Leusink, C.A. van der Jeugd, G.C.A.M. Janssen and S. Radelaar 91 (1995) 162

3D simulation of tungsten low-pressure chemical vapor deposition in contact holes, E. Bär and J. Lorenz 91 (1995) 321

Evaluation of selective tungsten plugs on TiN, W and AlSi by analytical and electrical measurements, S.E. Schulz, B. Hintze, W. Grünewald, O. Fiedler and T. Gessner 91 (1995) 326

Growth rate modeling for selective tungsten LPCVD, H. Wolf, R. Streiter, S.E. Schulz and T. Gessner 91 (1995) 332

Selective deposition of tungsten on ITM-$CoSi_2$, J.D. Kähler, D. Depta and R. Ferretti 91 (1995) 339

W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height, M. Mamor, E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane 91 (1995) 342

A highly reliable, low cost 0.5 μm three level tungsten metallization, M. Hain, H. Körner, B. Neureither and S. Röhl 91 (1995) 374

Deposition of titanium nitride/tungsten layers for application in vertically integrated circuits technology, G. Ruhl, B. Fröschle, P. Ramm, A. Intemann and W. Pamler 91 (1995) 382

Vanadium

Stress in Al, AlSiCu, and AlVPd films on oxidized Si substrates, G.J. Leusink, J.P. Lokker, M.J.C. van den Homberg, J.F. Jongste, T.G.M. Oosterlaken, G.C.A.M. Janssen and S. Radelaar 91 (1995) 215

The ohmic contact to the silicon Schottky barrier using vanadium silicide and gold or silver metallization, A.D. Remenyuk and N.M. Schmidt 91 (1995) 352

X-ray diffraction

Epitaxy of $CoSi_2$/Si(100): from Co/Ti/Si(100) to reactive deposition epitaxy, A. Vantomme, S. Degroote, J. Dekoster and G. Langouche 91 (1995) 24

Ni silicides formation and properties in RF sputtered Ni_{100-x}–Si_x thin films, A. Belu-Marian, M.D. Serbanescu, R. Manaila and A. Devenyi 91 (1995) 63

Cubic metastable $FeSi_{1-x}$ epitaxially grown on Si and MgO substrates, S. Degroote, A. Vantomme, J. Dekoster and G. Langouche 91 (1995) 72

Formation of $CoSi_2$ on strained $Si_{0.8}Ge_{0.2}$ using a sacrificial Si layer, R.A. Donaton, S. Kolodinski, M. Caymax, P. Roussel, H. Bender, B. Brijs and K. Maex 91 (1995) 77

Metallurgical and electrical investigation of Pt_5Ni_{95}/silicon interactions, F. Corni, C. Nobili, G. Ottaviani, R. Tonini, B. Grignaffini Gregorio and G. Queirolo 91 (1995) 107

Investigation of the oxidation behaviour of thin film and bulk copper, M. O'Reilly, X. Jiang, J.T. Beechinor, S. Lynch, C. Ní Dheasuna, J.C. Patterson and G.M. Crean 91 (1995) 152

Some particular features of the condensation process, structure and properties of thin metal films caused by self-ion bombardment, I.V. Gusev, A.A. Mohnjuk, V.I. Chapljuk and V.P. Belevsky 91 (1995) 182

Ti nitride phases in thin films deposited by DC magnetron sputtering, R. Manaila, D. Biro, P.B. Barna, M. Adamik, F. Zavaliche, S. Craciun and A. Devenyi 91 (1995) 295

W/Si Schottky diodes: effect of sputtering deposition conditions on the barrier height, M. Mamor, E. Dufour-Gergam, L. Finkman, G. Tremblay, F. Meyer and K. Bouziane 91 (1995) 342

X-ray fluorescence

Nucleation and growth of CVD-W on TiN studied by X-ray fluorescence spectrometry, M.S. Marangon, G. Queirolo and C. Savoia 91 (1995) 157